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Docket No. 0953.1017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :

Masashi GABE et al. :

Serial No. 10/501,405: Group Art Unit: 3748

Filed: July 15, 2004: Examiner: Nguyen, Tu Minh

For: EXHAUST GAS PURIFYING SYSTEM AND METHOD OF EXHAUST GAS PURIFICATION

APPEAL BRIEF

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In a Notice of Appeal filed January 29, 2007, the Applicants appealed the Examiner's October 5, 2006 Office Action finally rejecting claims 1, 3, 5, 6, 8, 10 and 13. Therefore, Appellants' Brief is due March 29, 2007. Appellants' Brief, together with the requisite fee set forth in 37 C.F.R. § 1.17, is submitted herewith.

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I. Real Party in Interest (37 C.F.R. § 41.37(c)(1)(i))

The real party in interest in this Appeal is Isuzu Motors Limited., the assignee of the subject application.

II. Related Appeals and Interferences (37 C.F.R. § 41.37(c)(1)(ii))

Appellants, Appellants' legal representatives, and the assignee are not aware of any other appeals or interferences which will directly affect or be directly affected by, or have a bearing on, the Board's decision in the pending Appeal.

III. Status of Claims (37 C.F.R. § 41.37(c)(1)(iii))

Appealed claims 1, 3, 5, 6, 8, 10 and 13 have been rejected. Claims 2, 4, 7, 9, 11 and 12 have been cancelled. Claims 1, 3, 5, 6, 8, 10 and 13 are the only pending claims in the subject application.

IV. Status of Amendments (37 C.F.R. § 41.37(c)(1)(iv))

Appellants' Amendment filed December 28, 2006 was considered and the accompanying amendments to the claims were entered by the Examiner for purposes of Appeal as indicated by the Advisory Action mailed January 18, 2007.

V. Summary of Claimed Subject Matter (37 C.F.R. § 41.37(c)(1)(v))

The present invention relates to an Exhaust gas purifying system and method of purifying exhaust gas.

Referring to Figs. 1-3 and pp. 10-11, paragraphs 0051-0058, the present claimed exhaust gas purifying system 1, as set forth in claim 1, is provided with a NOx occlusion reduction type catalyst 30 having a catalyst metal 32 and a NOx occluding substance 33, in an exhaust passage 3 of a diesel engine 10, and a control unit including a normal control operation means C10 (see Fig. 5 and paragraph [0066]), a regeneration control initiation judging means C20 for detecting a regeneration control initiation timing for said NOx occlusion reduction type catalyst 30, a rich-burn control operation means C40 for executing a rich-burn control operation for generating an exhaust gas G which is in a fuel-rich state, accompanying recirculation of EGR gas Ge, and a catalyst activation control operation means C30 (see paragraph [0068]) for executing a control operation for activating said catalyst metal 32 immediately before said rich-burn control operation is performed.

The catalyst activation control means C30 executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor (see pp. 13, paragraph [0068]), in the condition of an EGR valve 42 being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders and controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation, wherein regeneration control is performed, to thereby purge or release NOx (see pp. 13, paragraph [0069]).

Referring to Figs. 6-8, and pp. 13-19, paragraphs [0070] – [0095], the present claimed method of exhaust gas purification, as set forth in claim 6, includes performing a catalyst activation control operation by the catalyst activation control operation means C30 (see Fig. 6, step S10) when it is judged by the regeneration control initiation judging means C20 that a regeneration control for the regeneration of the NOx occlusion reduction type catalyst 30 is to be initiated (see Fig. 6, steps S20-S40) and thereafter executing a rich-burn control operation accompanying a recirculation of EGR gas Ge by said rich-burn control operation means C40 to thereby regenerate the NOx occlusion reduction type catalyst 30 wherein in the course of the catalyst activation control operation, a burning control operation in the vicinity of the stoichiometric air/fuel ratio in the range of 0.8 to 1.1 in terms of an excess fuel factor is

performed in the condition of the EGR valve being totally closed (see pp. 16, paragraph [0081] and Fig. 7, step S31), and at the same time, a multi-stage injection and an early injection (see pp. 18-19, paragraph [0091]) is executed in the fuel injection into cylinders and the torque control of the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation, is executed, and wherein regeneration control is performed, to thereby purge or release NOx from a NOx occlusion reduction type catalyst.

Referring to Fig. 6 and pp. 12-16, paragraphs [0065] – [0081], the present claimed method of purifying exhaust gas provided with a NOx occlusion reduction type catalyst 30 in an exhaust passage 3 of a diesel engine 10, as set forth in claim 13, includes executing a normal control operation (see Fig. 6, step S10), detecting a regeneration control initiation timing for the catalyst 30 (see Fig. 6, step S20), executing a rich-burn control operation and generating and exhaust gas G which is in a fuel-rich state, accompanying recirculation of EGR gas Ge (see Fig. 6, step S40). The method as set forth in claim 13, further includes activating a catalyst metal 32 of the catalyst 30 (see Fig. 6, step S30) immediately before the rich-burn control operation is performed.

The method as set forth in claim 13, further includes that the catalyst 30 includes a NOx occluding substance 33 (see pp. 12, paragraph [0060]) that is transformed into nitrate as a result of occluding activities, which is then regenerated back to allow continuation of NOx occlusion (see paragraphs [0062] – [0063] and Figs. 6-8, for example).

Further, the method as set forth in claim 13, includes that the catalyst activation control operation executes a burning control operation in the condition of an EGR valve being totally closed (see pp. 16, paragraph [0081] and Fig. 7, step S31), and at the same time, controlling the torque generation of the diesel engine 10 by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation.

Referring to Fig. 3 and pp. 11-12, paragraph [0060], as set forth in dependent claims 3 and 8, the NOx occlusion reduction type catalyst includes a reducer occluding substance 34.

Referring to Fig. 8 and pp. 17-18, paragraphs [0087] – [0090], as set forth in dependent claims 5 and 10, the rich-burn control operation means C40 recirculates EGR gas Ge for generating an exhaust gas which is in a fuel-rich state and controls the torque generation of the diesel engine 10 by an intake control of the diesel engine 10 to reduce the torque variation

during the transition from catalyst activation control operation to the rich burn control operation or from the rich burn control operation to the normal control operation.

VI. Grounds of Rejection to be Reviewed on Appeal (37 C.F.R. § 41.37(c)(1)(vi))

The rejection of claims 1, 5, 6, 10 and 13 under 35 U.S.C. §103(a) as being unpatentable over Pott '142 (U.S. Patent No. 5,992,142) in view of Pott '064 (U.S. Patent No. 6,164,064) and the rejection of claims 3 and 8 under 35 U.S.C. §103(a) as being unpatentable over Pott '142 in view of Pott '064 and further in view of Yokoto et al. (U.S. Patent No. 6,269,634) is to be reviewed on appeal.

As previously mentioned, claims 2, 4, 7, 9, 11 and 12 were cancelled.

Thus, the grounds of rejection to be reviewed on appeal relate solely to the rejection under 35 U.S.C. § 103(a) over Pott '142 in view of Pott '064 and further in view of Yokoto et al. with respect to remaining claims 1, 3, 5, 6, 8, 10 and 13.

VII. Argument (37 C.F.R. § 41.37(c)(1)(vii))

The References

Pott '142

Pott '142 is directed to NOx conversion of exhaust gases from lean mixture engines such as Diesel engines, by providing a catalytic converter having three zones, the first containing an NOx storage material on a γ-aluminum oxide layer, the second zone having a layer with a noble metal and a third zone having an oxygen storage layer (see Abstract). Further, regarding operation of EGR valve, Pott '142 discloses that the system has different EGR rates in the first operating condition (ordinary or normal engine operation) and the second operation condition (regeneration control) (see column 6, lines 8-14). Further, Pott '142 discloses that the quantity of EGR gas is reduced during a change from a first operating condition to a second operating condition (see column 6, lines 55-58). Further, when the vehicle is coasting or the engine is idling with approximately 20% filling of the NOx accumulator with NO_2 or operating in a lower partial load range with approximately 50%filling of the accumulator with NO_2 , regeneration of the NOx is initiated by the control unit (column 10, lines 40-49). That is, when the regeneration is performed, the control valve (i.e., EGR valve) 10 as shown in FIG. 1 is opened so that a high EGR rate is achieved. Also, see column 12, lines 1-4 which states that regeneration is initiated by opening the EGR valve 10.

Pott '064

Pott '064 is directed to the removal of sulfur from NOx reservoir catalysts, where sulfur inhibits the absorption of NOx by the reservoir catalysts (see column 1, lines 10-21).

Yokoto et al.

Yokoto et al. is directed to an engine control device, for an engine provided with an NOx-absorbing material arranged in an exhaust passage for absorbing Nox in an oxygen-rich atmosphere, and releasing Nox and absorbing sulfur content when the oxygen concentration drops, includes a discriminator for judging whether the amount of sulfur absorbed by the Nox-absorbing material has reached a prescribed quantity, and a reductant concentration controller which increases the temperature of the NOx-absorbing material by decreasing a quantity related

to EGR ratio for desulfurizing the NOx-absorbing material based on the result of the judgment (see Abstract).

Independent Claims 1, 6 and 13

The catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders and controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation

Independent claims 1, 6 and 13 recite a system and method including:

> "said catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders and controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation, and wherein regeneration control is performed, to thereby purge or release NOx from a NOx occlusion reduction type catalyst."

The Examiner admits that Pott '142 fails to teach or suggest "the stoichiometric air/fuel ratio in a range of 0.8 to 1" as recited in claim 1, for example.

The Examiner also admits that Pott '142 fails to teach or suggest the Applicants' "multi-stage injection" and "early injection" according to the claimed invention, as recited in claim 1, for example.

The Applicants respectfully submit that Pott' 142 fails to disclose "wherein said catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed **(emphasis added)**," as recited in claim 1, for example. That is, Pott '142 fails to disclose that when regeneration control is done, the EGR valve 10 is wholly closed.

Further, Pott '142 fails to disclose "controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation," as recited in claim 1.

In contrast, Pott '142 discloses that during the second set of operating conditions, the air supply to the internal combustion engine is preferably reduced, desirably by throttling in the air intake duct (see column 5, line 65 – column 6, line 7). Further, Pott '142 discloses that the **throttle valve 8 is partially closed** so that the fresh air supply to the air intake 11 is sharply reduced (see column 10, lines 40-47; and column 13, lines 46-49). Further, at column 11, lines 51-57, Pott '142 discloses that in sensing the load step 22 shown in FIG. 2, is carried out because regeneration, for example, by throttling the air supply, raising of the EGR rate and/or a higher quantity of injected fuel, is accompanied by a drop in power of the internal combustion engine. Further, at column 12, lines 1-4, Pott '142 discloses that regeneration is initiated by operating the throttle 8. Further, at column 12, lines 31-33, Pott '142 discloses that with increasing throttling, the CO supply of the engine increases, and the minimum regeneration period decreases. Based upon the above comments, it is understood that while the throttle valve 8 is operated when regeneration in carried out in Pott '142, the purpose of this operation is to reduce the regeneration period and is **not** related to "controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation," as recited in claim 1, for example. That is, the purpose of the above operation in Pott '142 has nothing to do with a control of torque-generation quantity of the engine such as prevention of lowering of power output of the internal combustion engine 1, such that while operation to close the valve is performed, adjustment of opening degree of the valve is not performed.

At page 4 of the Final Office Action, the Examiner admits that Pott '142 fails to disclose "wherein said catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders," as recited in claim 1, for example. The Examiner alleges that Pott '064 makes up for the deficiencies of Pott '142.

The Applicants respectfully submit that Pott '064 fails to make up for the deficiencies of Pott '142 as mentioned above.

Further, as previously mentioned, Pott '064 also fails to disclose "regeneration control is performed, to thereby purge or release NOx from a NOx occlusion reduction type catalyst" as recited in claim 1, for example. As mentioned above, Pott '064 teaches the removal of sulfur from NOx reservoir catalysts, where sulfur inhibits the absorption of NOx by the reservoir catalysts (see column 1, lines 10-21). The Applicants respectfully submit that a system for purifying exhaust gas including at least "a regeneration control initiation judging means" as recited in claim 1, for example, for regenerating a NOx occlusion reduction type catalyst is fundamentally different from a method and system of removing sulfur from a catalyst.

The Applicants also respectfully submit that no where in Pott '064 is it discussed or taught that the torque generation of the engine is controlled by an intake control to reduce the torque variation during the transition of the catalyst activation control operation means from normal control operation to catalyst activation operation. In contrast, Pott '064 is directed to a process for desulfurization of a Diesel Engine, including a NOx regeneration and catalyst temperature-raising procedure. Further, although column 3, lines 60-64 of Pott '064 discusses that in Diesel engines, desulfurizing cannot be carried out in the same way as for lean Otto engines since operation at $\lambda \leq 1$ for any length of time is not possible because it reduces power, nowhere in Pott '064 does is state that the desulfurization process described includes "controlling of torque generation of the engine to reduce torque variation".

Regarding Yokoto et al., column 10, lines 35-60 of Yokoto et al. discusses that when an ignition retard control operation and time-split injection are performed before decreasing the quantity related to the EGR ratio as in the engine control device, it is possible to increase the amount of CO and improve the efficiency of eliminating the sulfur within the NOx-absorbing material. Further, Yokoto et al. discusses that if the ignition retard control operation or time-split injection is first performed and the amount of the recirculated exhaust gas is reduced after the amount of NOx released from the NOx-absorbing material has reached its maximum point, the amount of raw NOx is decreased by exhaust gas recirculation until the amount of the released NOx reaches its maximum point. Thus, the Applicants respectfully submit that the fuel injection control according to Yokoto et al. and the "multi-stage injection" and "early injection" as recited

in the claimed invention are fundamentally different from each other. In addition, the EGR control of Yokoto et al, is fundamentally different from that of the present invention.

Further, the Applicants respectfully submit that to define λ values to a range of "0.8-1.1" including values outside of the ranges disclosed in the above references is not a routinely practiced manner.

In establishing a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or discuss all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). *See* M.P.E.P. § 2142.

Dependent Claims 3 and 8

Dependent claims 3 and 8, recite that "said NOx occlusion reduction type catalyst comprises a reducer occluding substance". First, dependent claims 3 and 8 depend directly from independent claims 1 and 6 and are therefore patentable over Pott '142 in view of Pott '064 and further in view of Yokoto et al. for at least the reasons noted above.

Dependent Claims 5 and 10

Dependent claims 5 and 10 recite "said rich-burn control operation means recirculates EGR gas for generating an exhaust gas which is in a fuel-rich state and controls the torque generation of the diesel engine by an intake control of the diesel engine to reduce the torque variation during the transition from catalyst activation control operation to the rich-burn control operation or from the rich-burn control operation to the normal control operation".

Dependent claims 5 and 10 depend directly from independent claims 1 and 6 and are therefore patentable over Pott '142 in view of Pott '064 for at least the reasons noted above.

Conclusion

The combination of Pott '142 in view of Pott '064 and further in view of Yokoto et al. does not suggest, based on the motivation cited, to one of ordinary skill in the art "said catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders and controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation, and wherein regeneration control is performed, to thereby purge or release NOx from a NOx occlusion reduction type catalyst," as recited in independent claims 1, 6 and 13 . The combination of Pott '142 in view of Pott '064 and further in view of Yokoto et al does not teach or discuss all the claim features, as is required in establishing a *prima facie* case of obviousness, and the motivation cited is inadequate to suggest such a combination of references.

Next, the combination of Pott' 142 in view of Pott '064 in view of Yokoto et al. does not suggest that "said NOx occlusion reduction type catalyst comprises a reducer occluding substance," as recited in dependent claims 3 and 8. The combination of Pott' 142 in view of Pott '064 in view of Yokoto et al. does not teach or discuss all the claim features, as is required in establishing a *prima facie* case of obviousness.

Further, the combination of Pott' 142 in view of Pott '064 does not suggest that "said rich-burn control operation means recirculates EGR gas for generating an exhaust gas which is in a fuel-rich state and controls the torque generation of the diesel engine by an intake control of the diesel engine to reduce the torque variation during the transition from catalyst activation control operation to the rich-burn control operation or from the rich-burn control operation to the normal control operation", as recited in dependent claims 5 and 10. The combination of Pott' 142 in view of Pott '064 does not teach or discuss all the claim features, as is required in establishing a *prima facie* case of obviousness.

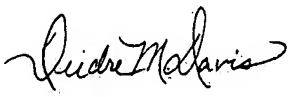
Therefore, as the combination of Pott' 142 in view of Pott '064 in view of Yokoto et al. does not suggest all the features of independent claims 1, 6 and 13 and does not suggest all the features of dependent claims 3, 5, 8 and 10, these claims patentably distinguish over Pott' 142 in view of Pott '064 in view of Yokoto et al.

In summary, the Applicants submit that claims 1, 3, 5, 6, 8, 10 and 13 patentably distinguish over the references relied upon. Accordingly, the Applicants respectfully request reversal of the Examiner's rejection.

The Commissioner is authorized to charge any Appeal Brief fee or Petition for Extension of Time fee for underpayment, or credit any overpayment, to Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP



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VIII. Claims Appendix (37 C.F.R. § 41.37(c)(1)(viii))

1. An exhaust gas purifying system provided with a NO_x occlusion reduction type catalyst having a catalyst metal and a NO_x occluding substance, in an exhaust passage of a diesel engine, and a control unit comprising a normal control operation means, a regeneration control initiation judging means for detecting a regeneration control initiation timing for said NO_x occlusion reduction type catalyst, a rich-burn control operation means for executing a rich-burn control operation for generating an exhaust gas which is in a fuel-rich state, accompanying recirculation of EGR gas, and a catalyst activation control operation means for executing a control operation for activating said catalyst metal immediately before said rich-burn control operation is performed;

wherein said catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders and controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation, and

wherein regeneration control is performed, to thereby purge or release NOx from a NOx occlusion reduction type catalyst.

2. (Cancelled)

3. The exhaust gas purifying system of claim 1,

wherein: said NO_x occlusion reduction type catalyst comprises a reducer occluding substance.

4. (Cancelled)

5. The exhaust gas purifying system of claim 1,

wherein: said rich-burn control operation means recirculates EGR gas for generating an exhaust gas which is in a fuel-rich state and controls the torque generation of the diesel engine by an intake control of the diesel engine to reduce the torque variation during the transition from catalyst activation control operation to the rich-burn control operation or from the rich-burn control operation to the normal control operation.

6. A method of exhaust gas purification to be carried out with use of an exhaust gas purifying system with a NO_x occlusion reduction type catalyst having a catalyst metal and a NO_x occluding substance, in an exhaust passage of a diesel engine, and a control unit comprising a normal control operation means, a regeneration control initiation judging means for detecting a regeneration control initiation timing for said NO_x occlusion reduction type catalyst, a rich-burn control operation means for executing a control operation for generating an exhaust gas which is in a fuel-rich state, accompanying recirculation of exhaust gas, and a catalyst activation control operation means for executing a control operation for activating said catalyst metal immediately before said rich-burn operation is performed, and performing a catalyst activation control operation by said catalyst activation control operation means when it is judged by said regeneration control initiation judging means that a regeneration control for the regeneration of the NO_x occlusion reduction type catalyst is to be initiated and thereafter executing a rich-burn control operation accompanying a recirculation of EGR gas by said rich-burn control operation means to thereby regenerate said NO_x occlusion reduction type catalyst, wherein in the course of said catalyst activation control operation, a burning control operation in the vicinity of the stoichiometric air/fuel ratio in the range of 0.8 to 1.1 in terms of an excess fuel factor is performed in the condition of the EGR valve being totally closed, and at the same time, a multi-stage injection and an early injection is executed in the fuel injection into cylinders and the torque control of the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation, is executed, and

wherein regeneration control is performed, to thereby purge or release NOx from a NOx occlusion reduction type catalyst.

7. (Cancelled)

8. The method of exhaust gas purification of claim 6,

wherein: said NO_x occlusion reduction type catalyst comprises a reducer occluding substance.

9. (Cancelled)

10. The method of exhaust gas purification of claim 6,

which comprises performing said rich-burn control operation to recirculate EGR gas to generate an exhaust gas which is in a fuel-rich state and to control the torque generation of the diesel engine by an intake control of the diesel engine to reduce the torque variation during the transition from catalyst activation control operation to the rich-burn control operation or from the rich-burn control operation to the normal control operation.

11-12. (Cancelled)

13. A method for purifying exhaust gas provided with a NO_x occlusion reduction type catalyst in an exhaust passage of a diesel engine, comprising:

executing a normal control operation;

detecting a regeneration control initiation timing for said catalyst;

executing a rich-burn control operation and generating an exhaust gas which is in a fuel-rich state, accompanying recirculation of EGR gas; and

activating a catalyst metal of said catalyst immediately before said rich-burn control operation is performed,

wherein said catalyst includes a NO_x occluding substance that is transformed into nitrate as a result of occluding activities, which is then regenerated back to allow continuation of NO_x occlusion, and

wherein said catalyst activation control operation executes a burning control operation in the condition of an EGR valve being totally closed, and at the same time, controlling the torque generation of the diesel engine by an intake control to reduce the torque variation during the transition from the normal control operation to the catalyst activation control operation.

IX. Evidence Appendix (37 C.F.R. § 41.37(c)(1)(ix))

None

X. Related Proceedings Appendix (37 C.F.R. § 41.37(c)(1)(x))

None